	er ID 62876 er 12, 2010 1:04:23 PM										Page 1
Item ID: Revision ID:	D117-762-011		Accept				s	Setup			
	Skidtube 10/12/2010			Cust Item II Customer:	D:				Stop		
Approvals:	Process Plan:	Date: / ()-//) Date:	Tooling: SPC (Y/N):		te:	- 	F	Run	Start Stop		
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #		Accept Qty	Reje Qty		Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr										
N/A	Rev A										
DC Document Control	DOCUMENT CO Mem Photo		0.00 0.00 PPP D117-762-011	CHG002 510	ulii	_	<del>18)</del> 4	for	BG.	10-10	0-28
110 Packaging Packaging	Pick Kit <b>Mem</b>	10	0.00			-	rolal	9 <u>&amp;</u>	sf	) PO	
120 QC	QC4- 100% Inspe	ect kits for completeness	0.00	Salulu		_(	(a)				

Quality Control

Dart Aerospac	e Ltd
---------------	-------

W/O:	******	WORK ORDER CHAN	IGES				ŧ
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	oprovai*
Part No	:	PAR #: Fault Category:	NCR: Yes	No DQA	<b>\</b> :	_ Date:	

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_ Date: \_\_\_\_\_

ł	WORK ORDER NON-CONFORMANCE (NCR)						
	Description of NC	Corrective Action Section B			Varification	Approval	<b>A</b>
ATE STEP Description of Section A		Initial Action Description Sign & Chief Eng Chief Eng Date		Section C	Chief Eng	Approval QC Inspector	
						ii	
					,		
						i	
	STEP	STEP Description of NC Section A	Section A Initial	STEP Section A Initial Action Description	STEP Section A Initial Action Description Sign &	STEP Section A Initial Chief Eng Action Description Sign & Date Section C	STEP Section A Initial Action Description Sign & Date Section C Chief Eng

# Work Order ID 62876

Tuesday, October 12, 2010 1:04:23 PM



Page 2

Item ID:

D117-762-011

Accept

Setup Start

Stop

Reject

Number

**Revision ID:** 

**Start Date:** 

Item Name:

Skidtube

**Required Date: 10/22/2010** 

10/12/2010

Start Qty: 1.00

**Req'd Qty:** 1.00

**Cust Item ID: Customer:** 

**Tool ID** 

Reference:

**Approvals:** 

Process Plan:

Operation

Packaging

Description

Date:

Date: Tooling:

SPC (Y/N):

Set Up/

0.00

**Run Hours** 

Date:

Tool # Plan

Code

Date:

Run Start

Reject

Qty

Stop

Sequence ID/ Work Center ID

130

Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D117-762-011 Location:

140

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Accept

Qty

Insp.

Stamp

10/11/12 Ho) MF 10-11-11

Dart A	eros	pace	Ltd
--------	------	------	-----

W/O:			WORK ORDER CHANGES						
DATE	STEP	PR	OCEDURE CHANGE	Ву	Qty Approv		Approvai QC Inspector		
				1					
~			Section 11 - 11 - 12 - 12 - 12 - 12 - 12 - 12						
Part No:		PAR #: Fault Category:		NCR: Yes	A:	Date:			
	Resolution: _		Disposition:	QA: N/C (	Closed:		Date: _		
NCR:			WORK ORDER NON-CON	FORMANCE (NC	R)			<del></del>	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
	T	Description of NC		Corrective Action Section B			Approval	A	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Chief Eng	Approval QC Inspector	
						Ī			
				mineral management is a second of the second					
						,			

**Picklist Print** Page 1 Tuesday, October 12, 2010 1:04:26 PM Work Order ID: 62876 Parent Item: D117-762-011 Parent Item Name: Skidtube **Required Date: 10/22/2010 Start Date: 10/12/2010** Start Qty: 1.00 Required Qty: 1.00 Comments: IPP Rev:A□07.06.11□New Issue□ EC IPP Rev:B 08-02-22 change to revA DD verified by:ec IPP Rev C 08.12.19 incorporated DSI9435 EC verified by:DD Replacement Mfg/ Component Item ID/ Primary Last Qty per Kit Total Bin Route Unit of Qty on Qty Date Status Item Name Hand Item Location Location Measure Item ID Purch Seq ID Issued Issued Qty D117-762-041 Manufactured No 110 Each 0.0000 rollile. Replacement Skidtube AN3C4A Purchased 110 1,511.000 No Each **BOLT** Location Loc Qty Loc Code ST245 20 20 110139 ST303 3 115438 3 ST350 1488 114108 14 114416 12 114523 2 \_115300\_ 460 115589 1000 AN960C10L NAS1149C0332 110 29.0000 Purchased No Each MILSE16 10/10/988 washer Location Loc Qty Loc Code

ST245 29 29 107534

Dart Aerospace Ltd	Darl	t Ae	ros	pace	e Ltd
--------------------	------	------	-----	------	-------

Dart Ae	rospace	Ltd							•
W/O:			WC	ORK ORDER CHANGE	ES				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
			- <b>8.4 P</b>						
Part No		DAD #-	Fault Cate	aory:	NCP: Yes	No. DOA		Data	
i ait ito			Fault Category:						
			Disposition: QA: N/C Closed: Date					Date:	
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCF	<b>?</b> )			
DATE	STEP	Description of NC Section A	Initial Action Description Chief Eng Chief Eng			Sign & Section C		Approval Chief Eng	Approval QC Inspector
77.							•		
				· · · · · · · · · · · · · · · · · · ·					

~ Tuesday, October 12, 2010 1:04:27 PM

Work Order ID: 62876 D117-762-011 Parent Item: Parent Item Name: Skidtube **Required Date: 10/22/2010** Start Date: 10/12/2010 Start Qty: 1.00 Required Qty: 1.00 D3512-1 No 110 Manufactured Each 13.0000 Wearplate Location Loc Qty Loc Code ST500 13 55466 12 AN6-52A Purchased No 110 Each 27.0000 . 2 Location Loc Qty Loc Code ST344 27 27 112314 TMS21042L6 Purchased 110 No Each 240.0000 Location Loc Qty Loc Code ST300 240 111578 114495 36 115300 200 D3864-1 110 Manufactured 8.0000 Each Bushing Location Loc Qty Loc Code ST092

47351

Dart Ae	rospace	e Ltd					•		
W/O:			WC	RK ORDER CHANGI	ES				1
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approvaî QC Inspector
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No <b>DQ</b>	A:	Date: _	
	R	esolution:	Disposition: QA: N/C Closed: Date				Date: _		
NCR:		1	WORK ORDI	ER NON-CONFORMA	NCE (NCF	₹)			
		Description of NC		Corrective Action Section	on B	Verifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	& Sect	ion C	Approval Chief Eng	Approval QC inspector
		,							
					:				
	1								

# Page 9 of 10

### 5.0 **PARTS LIST**

### D117-762-011 Skidtube Parts List 5.1

Item	Qty -011	Qty -041	Part Number	Description
	X_		D117-762-011	SKIDTUBE INSTALLATION
	1	· X	D117-762-041	REPLACEMENT SKIDTUBE
	,			
1		1	D3582-041	SKIDTUBE ASSEMBLY
2	2		**1121-51002	SKID SHOE
3	2		**1121-51102	CLAMPING RING
4	8		**LN9380M8X45	HEXAGON BOLT
5	8		**LN9023A8-1.4544.9	LOCKING WASHER
6	8		**LN9025-0815K	WASHER (OR LN9025-0815L)
10		1	*D2965	CAP
11		2	***AELS-1032-225	INSERT
12	•	2	*AN3C5A	BOLT
13		2	*AN960C10L	WASHER
20A		1	*D3508-9	WEARPLATE
20B		1	*D3558-9	GASKET
21A		1	*D3508-3	WEARPLATE
21B		1	*D3558-3	GASKET
22A		1	*D3508-11	WEARPLATE
22B		1	*D3558-11	GASKET
23A		1	*D3508-13	WEARPLATE
23B		1_	*D3558-13	GASKET
24		36	*AELS-1032-130	INSERT
25	8	28	*AN3C4A	BOLT
26	8	28	*AN960C10L	WASHER
27	2		D3512-1	WEARPLATE
30		2	*AELS-1032-130	INSERT
31		2	*AN4-4A	BOLT
32		2	*AN960JD416L	WASHER
40		2	*D3492-049	PLUG ASSEMBLY
41		2	***NAS1611-016	O-RING
42		2	*D3492-051	PLUG ASSEMBLY
43		2	***NAS1611-015	O-RING
44		6	*D3492-053	PLUG ASSEMBLY
45		6	***NAS1611-012	O-RING
50	2		AN4-51A	BOLT
51	4		D2972	BUSHING
52	2		MS21042L4	NUT (OR MS21042-4)

\* PART IS INCLUDED WITH D3582-041 SKIDTUBE ASSEMBLY \*\* TO BE SUPPLIED BY CUSTOMER, LISTED AS REFERENCE ONLY \*\*\* DENOTES PART IS INCLUDED WITH ASSEMBLY ABOVE

• COPYRIGHT © 2007 BY DART AEROSPACE USA, INC •
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Revision: A

Date: 07.04.27

# 5.1 D117-762-011 SKIDTUBE PARTS LIST (IIN-D117-762) STEEL ONLY 32.8 D117-762-011 SKIDTUBE PARTS LIST (ICA-D117-762)

ITEM	Qty -011	Qty -041	PART NUMBER	DESCRIPTION
	х		D117-762-011	SKIDTUBE INSTALLATION
	_ 1	Х	D117-762-041	REPLACEMENT SKIDTUBE
			i	

# <u>IS:</u>

	[		
50	2	AN6-52A #	BOLT
51	4	D3864-1 /	BUSHING
52	2	MS21042L6 /	NUT (OR MS21042-6)

## WAS:

50	2	AN4-51A	BOLT	
51	4	D2972	BUSHING	
52	2	MS21042L4	NUT (OR MS21042-4)	

TO UPGRADE A D117-762-011 SKIDTUBE FROM CHG 001 TO CHG 002, THE FOLLOWING KIT CAN BE OBTAINED FROM DART:

Qty -041	PART NUMBER	DESCRIPTION  GROUND HANDLING HARDWARE CHANGE	
X	DSI 9435-011		
2	AN6-52A	BOLT	
4	D3864-1	BUSHING	
2	MS21042L6 NUT (OR MS21042-6)		

DESIGN	PH	DART AEROSPACE USA, INC		
DRAWN	PH	PORT HADLOCK, WA		
CHECKED	4	DRAWING NO.	REV. A	
MFG. APPR.	N/A	DSI 9435	SHEET 2 OF 2	
APPROVED	( Ustan	TITLE	SCALE	
DE APPR.	1	GROUND HANDLING F	HARDWARE CHG NTS	
DATE 08.1	12.04	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		